## Planning for Future Water Supply Arden Shores Water System





### **Current Water Supply System**

- One shallow well, 283 feet deep
- Two-inch diameter distribution piping
- Two underground storage tanks
- System is 60 years old and needs to be replaced with IEPA compliant design





### **Current Water Quality**

Currently meeting all IEPA water standards but ...

- High sodium
- High sulfate levels
- Hard water





### **Water Supply Alternatives**

Replace existing system with new well system

Connect to Lake Michigan Water Supply through City of North Chicago

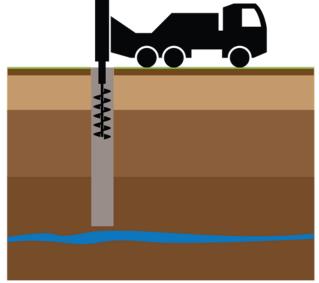
Connect to Lake Michigan Water Supply through Village of Lake Bluff



## Option 1 – New Well System Supply

- Drill one additional well
- Install six-inch diameter distribution piping
- Construct treatment facilities
- Total 20 year capital and operation cost: \$684,808

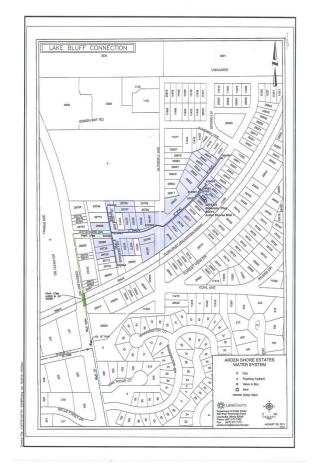






## Option 2 – Connect to Lake Bluff Water Supply

- Connect to Village of Lake Bluff water system
- Install six-inch diameter distribution piping and new water meter for each home
- Total 20 year capital and operation cost: \$526,824





# Option 3 – Connect to North Chicago Water Supply

- Install six-inch diameter distribution piping and new water meter for each home
- Connect to the City of North Chicago water system
- Total 20 year capital and operation cost: \$444,123
- Least costly option





#### **Cost Per Household**

- Option 3 is the least costly alternative
- All construction costs for this alternative to be funded by Lake County
- Existing customer charges

Flat unmetered water charge: \$33.42 per month

Proposed customer charges with North Chicago connection

Metered water charge for 4,000 gallons usage: \$39.16 per month



#### **Potential New Customers**

Customer charges for potential new customers adjacent to the water main that do not currently receive water service from the County but wish to be connected to a Lake Michigan Water Supply:

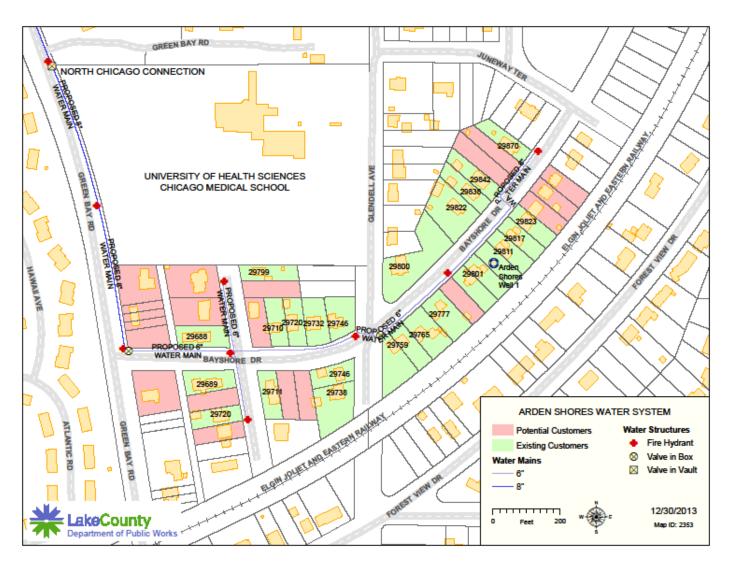
- Connection Fee: \$6,650 / home
- Water Cost: \$39.16 / month for 4,000 gallons



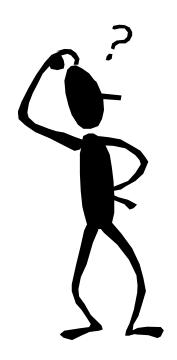
## Benefits of Lake Michigan Water From North Chicago

- Provides lowest cost option
- Long term reliability, high quality water
- Not susceptible to overuse or contamination
- Extends the life of household plumbing fixtures and appliances
- Positively impacts / protects property values
- Provides fire protection









#### Contact Us at Lake County Public Works:

Phone: 847-377-7500 Fred Treven

E-mail: <a href="mailto:ftreven@lakecountyil.gov">ftreven@lakecountyil.gov</a>

Mail: 650 W. Winchester Rd, Libertyville

Business Hours: 8:00 am - 5:00 pm

This presentation is available at: lakecountyil.gov/publicworks under Public Information

